Title (en)
WELDING METHOD OF SUBSTRATE WITH A MEMBRANE OF A MOBILE POLYMER MICROFLUIDIC CHIP

Title (de)
SCHWEISSVERFAHREN FÜR EIN SUBSTRAT MIT EINER MEMBRAN UND MEMBRAN AUS EINEM MIKROFLUIDISCHEN POLYMERCHIP

Title (fr)
PROCÉDÉ DE SOUDAGE DE SUBSTRAT AVEC UNE MEMBRANE ET MEMBRANE DE PUCE POLYMERE MICROFLUIDIQUE

Publication
EP 2745977 B1 20181121 (EN)

Application
EP 12823344 A 20120229

Priority
- CN 201110235234 A 20110816
- CN 2012071781 W 20120229

Abstract (en)
[origin: EP2745977A1] The present invention discloses a welding method for substrate and membrane of membrane mobile polymer microfluidic chip, which relates to the manufacturing technology of membrane mobile polymer microfluidic chip and comprises the following steps: before the welding, the substrate is fixed, the surface of the substrate is covered with the membrane; the membrane is pressed against the surface of the substrate, and in the course of welding, the laser irradiates the welding area on the substrate through the membrane, and the welding area fuses and then welds the substrate and membrane together. The present invention realizes the firm welding between membrane and substrate of membrane mobile polymer microfluidic chip, and ensures that the weld face is flat and uniform.

IPC 8 full level
B23K 26/20 (2014.01); **B29C 65/16** (2006.01)

CPC (source: EP US)
B01L 3/502707 (2013.01 - EP US); **B29C 65/16** (2013.01 - US); **B29C 65/1635** (2013.01 - EP US); **B29C 65/1696** (2013.01 - EP US); **B29C 66/1122** (2013.01 - EP US); **B29C 66/242** (2013.01 - EP US); **B29C 66/244** (2013.01 - EP US); **B29C 66/344** (2013.01 - EP US); **B29C 66/53461** (2013.01 - EP US); **B29C 66/81267** (2013.01 - EP US); **B29C 66/81455** (2013.01 - EP US); **B29C 66/8266** (2013.01 - EP US); **B29C 66/82661** (2013.01 - EP US); **B29C 66/9221** (2013.01 - EP US); **B29C 66/9241** (2013.01 - EP US); **B29C 66/961** (2013.01 - EP US); **B81C 3/001** (2013.01 - EP US); B01L 2200/0689 (2013.01 - EP US); B01L 2300/044 (2013.01 - EP US); B01L 2300/0816 (2013.01 - EP US); B29C 65/1654 (2013.01 - EP US); B29C 66/7392 (2013.01 - EP US); B29C 66/82421 (2013.01 - EP US); B29C 66/82423 (2013.01 - EP US); B29C 66/8322 (2013.01 - EP US); B29C 66/9161 (2013.01 - EP US); B29C 66/919 (2013.01 - EP US); B29C 66/934 (2013.01 - EP US); B29C 66/939 (2013.01 - EP US); B29L 2031/756 (2013.01 - EP US); B81B 2201/058 (2013.01 - EP US); B81B 2203/0127 (2013.01 - EP US); B81C 2203/036 (2013.01 - EP US)

Cited by
DE102018210706A1; GB2533386A; GB2533386B; US10695760B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2745977 A1 20140625; **EP 2745977 A4 20160309**; **EP 2745977 B1 20181121**; CN 102319956 A 20120118; CN 102319956 B 20150422; JP 2014528837 A 20141030; JP 5966006 B2 20160810; US 2014216647 A1 20140807; US 9427735 B2 20160830; WO 2013023449 A1 20130221

DOCDB simple family (application)
EP 12823344 A 20120229; CN 201110235234 A 20110816; CN 2012071781 W 20120229; JP 2014525286 A 20120229; US 201214238848 A 20120229